

REMARKS

STATUS OF THE CLAIMS

Claims 1-20 are pending in the application.

Claims 1, 2, 5, 6, 9-11, 14, 15 and 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakajima (U.S. 6,325,287)

Claims 3, 4, 7, 8, 12, 13, 16, and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form.

According to the forgoing, the claims are amended, and thus, the pending claims remain for reconsideration, which is respectfully requested. No new matter has been added.

REJECTION

The independent claims are 1, 10 and 19, which are anticipatorily rejected over Nakajima. The Office Action Response to Arguments provides Nakajima allegedly teaching 'a region or regions of blocks of one or a plurality of two-dimensional codes comprising a predetermined number of neighboring and contiguous blocks.'

The independent claims 1, 10 and 19 are amended so the language of the claims provides "detecting one or more regions of two-dimensional codes, ***each region of a two-dimensional code containing enclosing by a margin a corresponding detected region of blocks*** comprising ~~at~~the predetermined number of the neighboring and contiguous blocks as ~~at~~the two-dimensional code." For example, the present application paragraphs 55-57, 60, and paragraphs 94-95 and FIGS. 1 (region 14), 2 (region 14), 7 (region 3), 10 (square C), and 12A (outermost square) support the claimed embodiments.

Support for the claimed embodiment can be found, for example, in FIGS. 3, 9-12 (in particular FIGS. 7, 10, and 12A) and paragraphs 91-100 of the present Application, as the first and second embodiments.

The Office Action relies on Nakajima column 9, lines 8-63 and FIG. 3 to meet the present claimed features "***detecting a plurality of regions of blocks ... detecting one or more regions of two-dimensional codes, each region of a two-dimensional code containing a corresponding detected region of blocks*** ..." However, when Nakajima is specifically applied to the language of independent claims 1, 10 and 19, using claim 1 as an example, a prima facie case of anticipation cannot be established, since Nakajima column 9, line 8-21 and FIG. 13A,

S3, S4, discuss labeling "black pixel contiguous regions" and determining if a total number of M black pixel contiguous regions is at least 257 or greater, which relate to pixel detection and a block detection, but fails to disclose, either expressly or inherently (fails to necessarily include), the claimed features, for example, "***detecting a plurality of regions of blocks ... each region of blocks comprising a number of neighboring and contiguous blocks***" and "detecting one or more ***regions of two-dimensional codes, each region of a two-dimensional code containing enclosing by a margin a corresponding detected region of blocks*** comprising at the predetermined number of the neighboring and contiguous blocks as at the two-dimensional code."

In other words, the present claimed "a square block unit of MXN pixels" can correspond to Nakajima's "black pixel continuous region," or a Nakajima white pixel continuous region, because Nakajima FIG. 13A discusses detecting continuous white or black pixels that can constitute one block of white or black pixels as one block of a two-dimensional code. Nakajima column 9, lines 8-10 expressly discusses "In step S3, as shown in FIG. 15, the CPU 52 successively numbers (labels), from top left to bottom right, regions [1, 2, 3, ...] each composed of continuous black pixels." Nakajima FIG. 11 expressly shows a region of 3 white blocks (column 7, lines 55-56). Also, Nakajima FIG. 17 expressly shows one black pixel contiguous region as one block of a two-dimensional code. Therefore, Nakajima FIGS. 13A and FIG. 15 black pixel contiguous regions 1, 2, 3 cannot anticipate the language of independent claims 1, 10 and 19 by failing to disclose expressly or inherently the claimed "***detecting a plurality of regions of blocks corresponding to a respective plurality of two-dimensional codes, each region of blocks comprising a number of neighboring and contiguous blocks*** from among said detected blocks that satisfy specific conditions from said scanned blocks" and "detecting one or more ***regions of two-dimensional codes, each region of a two-dimensional code containing enclosing by a margin a corresponding detected region of blocks*** comprising at the predetermined number of the neighboring and contiguous blocks as at the two-dimensional code."

Further, Nakajima column 15, lines 46-55 discuss detection of a plurality of two-dimensional codes, but fails to disclose, either expressly or inherently, a two-dimensional code detection according to the language of the claims, for example, "detecting one or more ***regions of two-dimensional codes, each region of a two-dimensional code containing enclosing by a margin a corresponding detected region of blocks*** comprising at the predetermined

number of the neighboring and contiguous blocks as at the two-dimensional code," because Nakajima only detects a plurality of two-dimensional codes based upon detecting corresponding blocks of pixels, which differs from the claimed detection based upon "***regions ... enclosing by a margin a corresponding detected region of blocks.***" More particularly, the present Application FIG. 10 (square C) and FIG. 12 (outermost square), illustrate examples of the claimed present invention's "detecting one or more ***regions of two-dimensional codes, each region of a two-dimensional code containing enclosing by a margin a corresponding detected region of blocks*** comprising at the predetermined number of the neighboring and contiguous blocks as at the two-dimensional code," and one benefit is even if the two-dimensional code is at an angle, the region containing the entire two-dimensional code can still be detected (paragraph 101 and FIGS. 10 and 12 of the present Application). For example, the present application paragraphs 55-57, 60, and paragraphs 94-95 and FIGS. 1 (region 14), 2 (region 14), 7 (region 3), 10 (square C), and 12A (outermost square) support the claimed embodiments.

DEPENDENT CLAIM 6

Dependent claim 6 provides an example of determining the claimed "***region of a two-dimensional code containing enclosing by a margin a corresponding detected region of blocks***" by "scanning an area of the detected region of blocks, from a point within said region of blocks, block by block having a predetermined size upward, downward, to the right and to the left of said point; detecting a position such that a number of black pixels within said scanned area block is less than a predetermined value; and extracting a square area including said detected position as at the region of at the two-dimensional code that contains aencloses by the margin the corresponding detected region of blocks, for each of the plurality of detected regions of blocks." FIG. 11 and paragraphs 96-99 support claim 6. Dependent claim 6 is allowable over Nakajima.

INTERVIEW

Applicant respectfully requests an interview with the Examiner to discuss the claimed embodiments based upon the foregoing amendments to the independent claims. In view of the remarks and claim amendments, withdrawal of the rejection of independent claims and allowance of pending claims is respectfully requested.

CONCLUSION

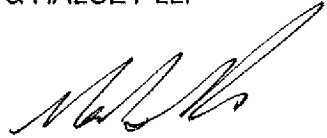
There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

Respectfully submitted,
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By: _____


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